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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,945	10/12/2004	Brendon Lilly	120496	8467
25944	7590	12/23/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320				KIM, PAUL L
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/501,945	LILLY, BRENDON
	<b>Examiner</b>	<b>Art Unit</b>
	Paul L Kim	2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 21 July 2004.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-25 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-5 and 8-25 is/are rejected.  
 7) Claim(s) 6 and 7 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "mixture" in claims 9 and 10 is used by the claims to mean "a combination of different data variables", while the accepted meaning is "a portion of *matter* consisting of two or more components in varying proportions that retain their own properties." The term is indefinite because the specification does not clearly redefine the term.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 and 8-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Remboski et al.

With regard to claim 1, Remboski et al teaches a method for monitoring the performance of at least one machine operator including the steps of: measuring at least one machine parameter during operation of the machine by the operator (¶ 62), generating at least one performance indicator distribution from measurements of the at least one machine parameter (fig. 4, parts 402-408), and calculating at least one performance indicator from the at least one performance indicator distribution (fig. 4, step 410).

With regard to claims 2 and 3, Remboski et al teaches providing feedback to the operator by displaying a performance indicator in real-time (fig. 1, part 114 and ¶ 37) and once the machine has completed an operation (¶ 83).

With regard to claims 4 and 8, Remboski et al teaches a machine parameter being a dependent machine parameter (fig. 1, parts 112-118).

With regard to claim 5, Remboski et al teaches machine parameters being sole parameters (¶ 62).

With regard to claims 9 and 10, Remboski et al teaches generating performance indicators including using a “mixture” of distributions to model the performance indicator distribution (¶ 25).

With regard to claim 11, Remboski et al teaches a performance indicator being generated by an algorithm (¶ 5).

With regard to claims 14 and 15, Remboski et al teaches combining performance indicators to yield overall performance where the weightings of the indicators change according to the other indicators (last two sentences of ¶ 41).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Remboski et al in view of Castelli et al.

Remboski et al teaches using an algorithm to generate performance indicators but does not specify the algorithm being an LBG. Castelli et al teaches using algorithms such as LBG for information retrieval in multidimensional systems. Since Remboski et al and Castelli et al are both within the art of determining indicator distributions, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Remboski et al, so that an LBG algorithm is used, as taught by Castelli et al, so as to derive the benefit of improved performance monitoring accuracy.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Remboski et al in view of Greineder et al.

Remboski et al teaches generating a performance indicator distribution, but does not specify using an LRM. Greineder et al teaches a method for ranking a plurality of features in a set based on importance using an LRM method (abstract). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Remboski et al, so that an LRM method is used, as taught by Greineder et al, so as to derive the benefit of an efficient monitoring system that improves overall system performance.

8. Claims 16-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Remboski et al in view of Deb et al.

With regard to claims 16-20, Remboski et al teaches a system for monitoring the performance of at least one machine operator comprising: a measuring device for measuring at least one machine parameter during operation of the machine by the operator (¶ 62), a means for generating at least one performance indicator distribution from measurements of the at least one machine parameter (fig. 4, steps 402-408), and a module for calculating at least one performance indicator from the at least one performance indicator distribution (fig. 4, step 410). Remboski et al, however, does not specify a remote server for generating the performance indicators. Deb et al teaches a remote server that monitors operating parameters of remote machines, equipment, etc (abstract). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Remboski et al, so that a remote server monitors the machine, as taught by Deb et al, so as to derive the added benefit of convenience from having the ability to monitor a plurality of machines from one location.

With regard to claims 21-25, Remboski et al teaches a display providing feedback to the operator by indicating performance in real-time (fig. 1, part 114 and ¶ 37) and indicating performance once the an operation has been completed (¶ 83).

***Allowable Subject Matter***

9. Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Goska et al teaches a system for monitoring parameters of a construction machine during an operator's work shift.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is 571-272-2217. The examiner can normally be reached on Monday-Thursdays 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and for After Final communications.

Art Unit: 2857

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

PK

December 7, 2004



MARC S. HOFF

SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800